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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,387	03/20/2001	Masayuki Miyazaki	500.39910x00	4078

20457 7590 08/28/2002

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EXAMINER

WELLS, KENNETH B

ART UNIT	PAPER NUMBER
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2816

DATE MAILED: 08/28/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/811,387

Applicant(s)

MIYAZAKI ET AL.

Examiner

Kenneth B. Wells

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-- Th MAILING DATE of this communication appears on th cover sheet with th corr spond nce addr ss --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7-9 and 11-16 is/are rejected.
- 7) ☒ Claim(s) 3,6 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

2. The disclosure is objected to because of the following informalities: on page 1, line 4, "the" to --a-- (note also line 7). On line 13 of page 1, "In actual..." is grammatically awkward and should be reworded. It is also noted that the specification has numerous other grammatical errors, all of which should be corrected in response to this office action.

Appropriate correction is required.

3. The drawings are objected to because Fig. 3 needs a "prior art" label. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. Claims 1-16 are objected to because of the following informalities: in claim 1, "composed of" on line 3 should be changed to --comprising--. On lines 8-9, "the voltage supplied to" should be changed to --a supply voltage of--. On line 15 of

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claim 1, "is" should be changed to --are--. In claim 2, line 7, "a" (both occurrences) should be deleted. On line 10 of claim 3, "said first instruction" lacks antecedent basis, as does "the three parameters of said clock signal frequency" in claim 4. Also in claim 4, "in order to meet the operating speed" is vague and indefinite (note also claim 5, lines 7-8), as is the limitation on the last three lines of claim 4. Also lacking antecedent basis are "the first" and "the second state" in claim 4. In claim 5, the limitation on the last five lines does not make sense, nor does the limitation of claim 6. Applicant should reword these claims in response to this action so that they can be understood. In claim 7, "said command signal" lacks clear antecedent basis because more than one has been previously set forth. Also in claim 7, "the external" and "the processing load" lack antecedent basis. Claims 9-16 have many of the same types of problems noted above with regard to claims 1-7 and should be corrected as well. Appropriate correction is required.

5. Claims 4, 5, 7, 11 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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These claims are so confusing due to translation problems that it cannot be determined what applicant means in these claims.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made. Claims 1, 2, 4, 5, 7-9 and 11-16 are rejected under 35

U.S.C. 103(a) as being unpatentable over Mizuno et al.

This reference teaches changing the frequency of a clock signal supplied to first circuit of an IC in response to the first circuit changing its operating state (see, e.g., column 3, lines 45-50); and also changing the voltage applied to a substrate of the transistors of the first circuit in response to the first circuit changing its operating state (discussed throughout Mizuno as the change in the threshold voltage).

Not disclosed by Mizuno et al is changing the supply voltage in response to the first circuit changing its operating state, but such would have been obvious to those having ordinary skill in the art who know that it is common to lower the Vcc voltage

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when the IC has been idle for a while, and since Mizuno et al already teaches monitoring for such an idle condition (see, e.g., column 3, lines 45-50), the lowering of Vcc during an idle condition does not represent a patentable distinction over Mizuno et al. The claims reciting the use of command signals from command decoders for controlling the clock frequency, the substrate bias and the level of the power supply voltage are also unpatentable because the use of such decoders for outputting any type of control signal is an old and well-known concept and those having ordinary skill in the art will know that such can be used to generate the (inherent) control signals needed to control the clock frequency, the substrate bias and the level of the power supply voltage.

Making the command decoder, second circuit or third circuit on a chip separate from the first circuit would have been obvious since this is also well-known in the art, for various advantages (e.g., being able to remove one circuit from a system and replacing it, while leaving the other circuits in place, a common technique in the art of semiconductor circuitry.

7. Claims 3, 6 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in

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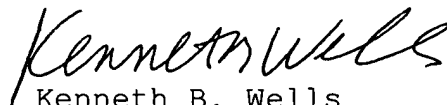
independent form including all of the limitations of the base claim and any intervening claims.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth B. Wells whose telephone number is (703) 308-4809. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan, can be reached on (703) 308-4876. The fax phone number for this Group is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Kenneth B. Wells
Primary Examiner
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August 26, 2002